

OPENING REMARKS*

by

Donald S. Fredrickson, M.D.
Director, National Institutes of Health

Last May I gave several seminars at the Institute of Medicine on The Scientific Experience. I tried to put into words some things I felt about experimental science, especially in biology and medicine, and the immediate culture in which it flourishes.

I included an attempt to explain something of the discipline and the orthodoxy that hold researchers in the natural sciences together, the driving compulsion there is to find and to understand, and the stretches of tedium that sometimes extend for long times between discoveries.

A critical part of the game is the perception of asymmetry in observed phenomena and, then, the devising of ways to test the reproducibility of those deviations from randomness. After the phenomena are found to be real, there comes the construction of explanations. The degree to which these are synthesized to fundamental generalizations or get extrapolated to useful purposes determines much of the excitement and satisfaction.

The testing and the commenting on new stretches of intellectual fabric--as will occur here in the next day-and-a-half--is essential to the process, and no small part of the uncommon aesthetic experience that is science.

* Presented at "The Structural Basis of Regulation," a Symposium in Memory of Gordon Tomkins (1926-1975), National Institutes of Health, Bethesda, Maryland 20014, on February 2, 1976.

It would be going too far to assume we have a corner on aesthetic experience, or on cerebral play. The heavy roles of perception, logic, and ego in science make still demands on the performers, however, and provide a consummate test for the right mix of certain human qualities.

There emerge from the endless, informal competition a few persons of rare qualities who will transcend their peers and form a locus of sustained intellectual excitement. Very occasionally one will also have the graces necessary to remain forever at the center of their affections.

In my mind, I can see Gordie Tomkins make a certain face at the suggestion this commentary might appear to be turning toward making him the subject of a Heldenleben. With his exquisite sense of irony he would shake off the Wagnerian armor and distract us by pulling a pin on one of the imaginary hand grenades he used to toss into corners to demolish Phillistine uprisings or incursions by the Huns.

I think of him as a master of Metaphor, in Aristotle's meaning of the word: the ability to grasp the relationship between distant things.

In Science, creative movement depends heavily on this talent; and Gordon's agile leaps were usually faster and often farther than anyone else's. Some of the larger concepts that emerged from his own thinking, and that he stimulated others to follow, will be among the threads of later discourse here.

Gordon's gift for metaphor spilled beyond biochemistry, however, into a sensitivity that made him an unforgettable companion. Any simple outing with him was likely to become an hilarious adventure. Even the briefest encounter with him left engrams and gestures which instantly revealed that you had been in his company.

There was, too, an unselfconscious charm and sympathy that helped to make his manner absolutely infectious. The exposure to the infection also was likely to be prolonged; for Gordon was unselfish with his time and apparently distrustful of clocks.

It is now more than 25 years ago since I first met Gordon Tomkins. We were interns together at Peter Bent Brigham. The pay was free laundry, all one could eat, and the spirit-bonds that always exist among interns, who are like novices at some monstrous boot-camp.

As is probably true of all physicians, I remember more of that year than any since. Some of the brightest memories have Gordon in them. Like the muggy Saturday in that first July, when we had been sleepless for the requisite 100 hours. We went out to play tennis, and when we found we could only carry on from a sitting position, spent a half-hour in helpless laughter.

There was the time when the visiting expert dropped out of Grand Rounds and I was assigned to assemble some remarks in his place. Gordon instantly contrived a plan wherein I would appear in disguise as a specialist from Vienna. I often wonder how close I came to exile when he lost the false beard on the eve of my appearance.

As I remember it, we also both managed to get the mumps that year. Gordon gave me a red ribbon to tie around my waist. When his turn came, he needed it more than I.

If the Gods seemed cruel, then--and now, perhaps it is because they had given him gifts that were so much greater than the rest. To be in his company was our compensation, and we are each indescribably richer because he was one of us.

We are proud that Gordon's memory has unlimited residence here. And it is a warming thing to have his colleagues and friends assemble once again in his honor.

Thank you for giving me this chance to say what is in the heart of all NIH.